FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

Note:
This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

READ THIS FIRST

Trademark Information

- Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.
- Pentium® is a registered trademark of Intel Corporation.
- SD™ is a trademark.
- Other names and products may be trademarks or registered trademarks of their respective owners.

Product Information

- Product design and specifications are subject to change without notice. This includes primary product specifications, software, software drivers, and user's manual. This User Manual is a general reference guide for the product.
- The product and accessories that come with your digital video camera may be different from those described in this manual. This is due to the fact that different retailers often specify slightly different product inclusions and accessories to suit their market requirements, customer demographics, and geographical preferences. Products very often vary between retailers especially with accessories such as batteries, chargers, memory cards, cables, carrying cases/pouches, and language support. Occasionally a retailer will specify a unique product color, appearance, and internal memory capacity. Contact your dealer for precise product definition and included accessories.
- The illustrations in this manual are for the purpose of explanation and may differ from the actual design of your digital video camera.
- The manufacturer assumes no liability for any errors or discrepancies in this user manual.
- For user manual and driver updates, refer to our website or contact your dealer.

SAFETY INSTRUCTIONS

Read and understand all ***Warnings*** and ***Cautions*** before using this product.

Warnings

If foreign objects or water have entered the camera, turn the power Off and remove the batteries.
Continued use in this state might cause fire or electric shock. Consult the store of purchase.

If the camera has fallen or its case has been damaged, turn the power Off and remove the batteries.
Continued use in this state might cause fire or electric shock. Consult the store of purchase.

Do not disassemble, change or repair the camera.
This might cause fire or electric shock. For repair or internal inspection, ask the store of purchase.

Do not use the camera in areas near water.
This might cause fire or electric shock. Take special care during rain, snow, on the beach, or near the shore.

Do not place the camera on inclined or unstable surfaces.
This might cause the camera to fall or tilt over, causing injury.

Keep the batteries out of the reach of children.
Swallowing batteries might cause poisoning. If the battery is accidentally swallowed, immediately consult a physician.

Do not use the camera while you are walking, driving or riding a motorcycle.
This might cause you to fall over or result in traffic accident.

Cautions

Insert the batteries paying careful attention to the polarity (+ or –) of the terminals.
Inserting the batteries with its polarities inverted might cause fire and injury, or damage to the surrounding areas due to the battery rupturing or leaking.

Do not fire the flash close to anyone's eyes.
This might cause damage to the person's eyesight.

Do not subject the LCD monitor to impact.
This might damage the glass on the screen or cause the internal fluid to leak. If the internal fluid enters your eyes or comes into contact with your body or clothes, rinse with fresh water. If the internal fluid has entered your eyes, consult a physician to receive treatment.

A camera is a precision instrument. Do not drop it, strike it or use excessive force when handling the camera.
This might cause damage to the camera.

Do not use the camera in humid, steamy, smoky, or dusty places.
This might cause fire or electric shock.

Do not remove the battery immediately after long period of continuous use.
The battery becomes hot during use. Touching a hot battery might cause burns.

Do not wrap the camera or place it in cloth or blankets.
This might cause heat to build up and deform the case, resulting in fire. Use the camera in a well-ventilated place.

Do not leave the camera in places where the temperature may rise significantly, such as inside a car.
This might adversely affect the case or the parts inside, resulting in fire.

Before you move the camera, disconnect cords and cables.
Failure to do this might damage cords and cables, resulting in fire and electric shock.

Notes on Battery Usage

When you use the battery, carefully read and strictly observe the ***Safety Instructions*** and the notes described below:

- Use only the specified battery (NP60, 3.7V).
- Avoid using the battery in extremely cold environments as low temperatures can shorten the battery life and reduce digital video camera performance.
- When you are using the new rechargeable battery or rechargeable battery that has not been used for an extended period of time (the battery that passed the expiry date is an exception) might affect the number of images that can be captured. Therefore, to maximize its performance and lifetime, we recommend that you fully charge the battery and discharge it for at least one complete cycle before use.
- The battery may feel warm after long period of continuous use of the digital video camera or the flash. This is normal and not a malfunction.
- The digital video camera may feel warm after long period of continuous use. This is normal and not a malfunction.
- If the battery is not to be used for a long period of time, remove it from the digital video camera to prevent leakage or corrosion.
- If the battery is not to be used for a long period of time, store it after no battery power left. If the battery is stored for a long time in a fully charged state, its performance may be impaired.
- Always keep the battery terminals in a clean state.
- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.

CONTENTS

INTRODUCTION 8

Package Contents 9

GETTING TO KNOW YOUR DIGITAL VIDEO CAMERA 10

Front View 10
Rear View 11
LCD Monitor Information 12

GETTING STARTED 16

Installing the Battery 16
Turning the Power On/Off 16
Attaching the Strap 17
LED Indicators 17
Loading an SD Memory Card (Optional Accessory) 18
Using the LCD Panel 19
Setting the Date and Time 20
Choosing the Display Language 20
Formatting an SD Memory Card 21
Setting Image Resolution and Quality 22

PHOTOGRAPHY MODES 25

Capturing Still Images 25
Recording Video Clips 25
Normal Mode 26
Macro Mode 26
Using the Digital Zoom 27
Setting the Flash 28
Setting the Self-Timer 29

PLAYBACK MODE 30

Playing Back Still Images/Video Clips 30
Playing Back Still Images/Video Clips on TV 31
Zoom Playback 32
Thumbnail Display 32
Protecting Still Images/Video Clips 33
Slide Show Display 34
Deleting Still Images/Video Clips 35

MP3 MODE 36

AUDIO RECORDING MODE 37

Recording Audio Files 37
Playing Back Audio Files 38
Deleting MP3 / Audio Files 39

MENU OPTIONS 40

Video Menu 40
Capture Menu 42
Playback Menu 44
MP3 / Audio Menu 45
System Menu 46

TRANSFERRING RECORDED FILES TO YOUR COMPUTER 49

Step 1: Install the USB driver (Windows 98 users only) 49
Step 2: Connect the digital video camera to your computer 50
Step 3: Download still images, video clips and audio files 51

INSTALLING VIDEOSTUDIO 52

USING THE DIGITAL VIDEO CAMERA AS A PC CAMERA 53

Step 1: Install the PC camera driver 54
Step 2: Connect the digital video camera to your computer 55
Step 3: Run your application software(i.e. Windows NetMeeting) 55

SPECIFICATIONS 56

TROUBLESHOOTING 57

INTRODUCTION

Thank you for purchasing the new digital video camera!
This digital video camera is designed as an “entry-level” handy cam.
Equipped with a 5.0-megapixel CMOS sensor, your camera delivers good quality, 3350 x 2482 resolution images.

Other features provided by the digital video camera include the following:

LCD monitor -	2.5" full color LTPS LCD monitor (230K pixels) makes it easy to frame your subject when capturing images. It also displays the images you have captured.
Recording media -	32 MB internal memory (24 MB available for image storage). External memory supports SD memory cards up to 1 GB.
Digital Recorder/Player -	Store and play movies, video, music, pictures and more.
TV and PC connection -	You may view your images on a television monitor or a computer using the USB or A/V cables.
Advanced AV-IN recording -	Store live TV recording.
Digital zoom -	8x digital zoom permit zoom photography.
Flexible flash settings -	You may adjust the flash setting according to your lighting environment.

Package Contents

Carefully unpack your kit box and ensure that you have the following items. In the event that any item is missing or if you find any mismatch or damage, promptly contact your dealer.

Common product components:

- Digital video camera
- User's Manual
- USB Cable
- Software CD-ROM
- A/V IN cable
- Rechargeable Lithium-ion battery
- Battery charger
- A/V OUT Cable
- Earphone
- Camera Strap
- Camera Pouch

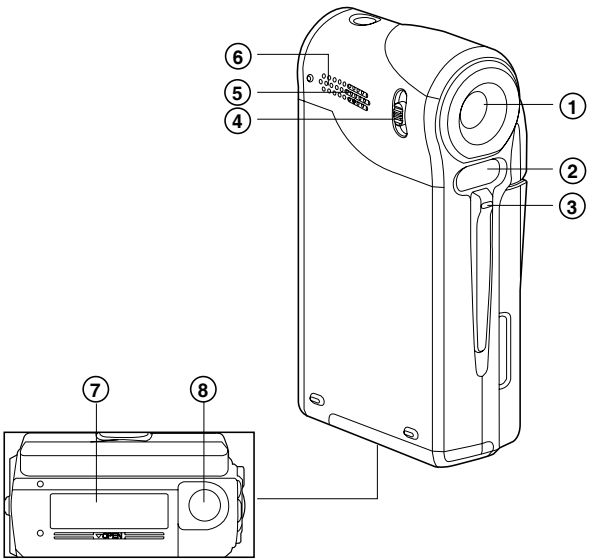
Common (optional) accessories:

- SD memory card
- Tripod

- Accessories and components may vary by retailer.

GETTING TO KNOW YOUR DIGITAL VIDEO CAMERA

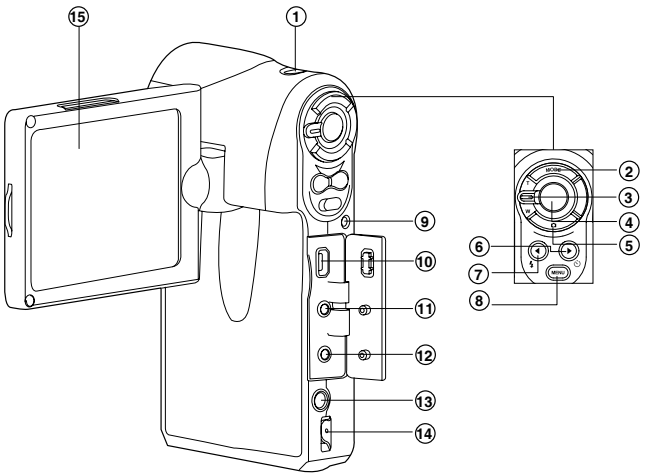
Front View



1. Lens
2. Flash
3. Self-timer LED
4. Focus switch
   - Normal mode
   - Macro mode
5. Speaker
6. Microphone
7. Battery/SD memory card cover
8. Tripod socket

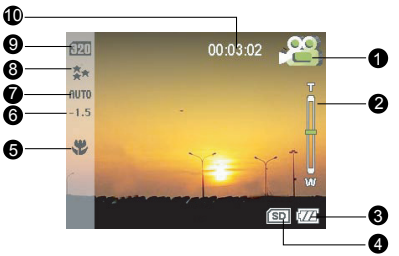
Rear View

1. ⏻ Power button
2. **MODE** Mode button
3. Zoom lever
   T Zoom in
   W Zoom out
4. ◯ Record button
5. 📷 Image button
6. ▶ Right button
   ⏲ Self-timer button
7. ◀ Left button
   ϟ Flash button
8. **MENU** Menu button
9. Status LED indicator
10. USB connector
11. A/V IN terminal
12. A/V OUT terminal
13. ∩ Earphone connector
14. Strap holder
15. LCD panel / monitor



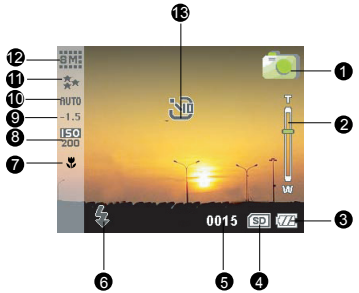
LCD Monitor Information

■ **Video Mode:**



1. video mode icon
2. Zoom status
3. Battery power indicator
   - Full battery power
   - Medium battery power
   - Low battery power
   - Virtually no battery power
4. SD memory card indicator
   - An SD memory card is loaded
   - No SD memory card is loaded
   - SD memory card is full
5. Macro mode
6. EV compensation
7. White balance
   - **AUTO** AUTO
   - DAYLIGHT
   - LAMP
   - FLUORESCENT-1
   - FLUORESCENT-2
   - SHADE
8. Video quality
   - SUPER FINE
   - FINE
   - NORMAL
9. Video resolution
   - 640 x 480 pixels
   - 320 x 240 pixels
10. Available recording time (Before recording)/ Elapsed time (While recording)

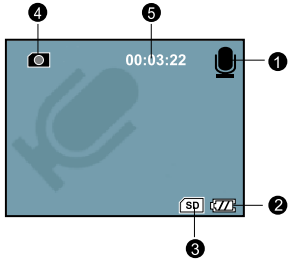
■ **Camera Mode:**



1. Still image mode icon
2. Zoom status
3. Battery power indicator
4. SD memory card indicator
5. Available number of shots
6. Flash mode
   - Flash off
   - Auto flash
   - Auto flash with red-eye reduction
7. Macro mode
8. ISO sensitivity
   - AUTO
   - ISO 100
   - ISO 200
   - ISO 400
9. EV compensation
10. AWB (White balance)
11. Image quality
    - SUPER FINE
    - FINE
    - NORMAL
12. Image resolution
    - 8M 3264 x 2448 (FW interpolation)
    - 5M 2560 x 1920
    - 3M 2048 x 1536
    - 1.2M 1280 x 96
    - .3M 640 x 480
13. Self-timer indicator (if used)
    - 3-seconds delay
    - 10-seconds delay

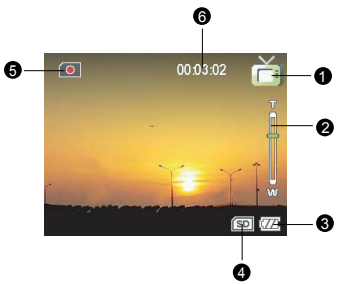
■ Audio Recording Mode

1. Audio recording mode
2. Remaining battery status
3. SD memory card indicator (if present)
4. Recording indicator
5. Available recording time (Before recording)/
   Elapsed time (While recording)



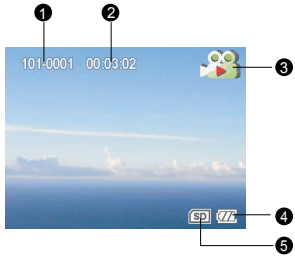
■ TV Recording Mode

1. TV recording mode
2. Zoom status
3. Remaining battery status
4. SD memory card indicator (if present)
5. Recording indicator
6. Available recording time (Before recording)/
   Elapsed time (While recording)

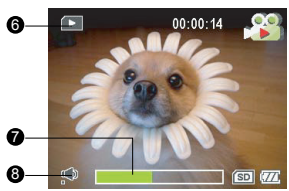


■ **Video Playback**

1. Folder and file name
2. Duration of current video
   (Before playback)/
   Elapsed time (During playback)
3. Video playback mode icon
4. Battery power indicator
5. SD memory card indicator
6. Playback indicator
7. Video status bar
8. Sound level (speaker volume)
   - Low volume
   - Mild volume
   - Medium volume
   - High volume
   - Fully volume
   - Mute (no sound)



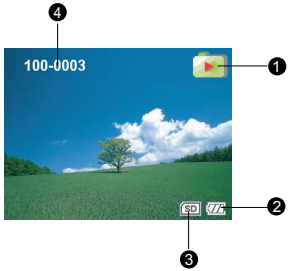
Before playback



During playback

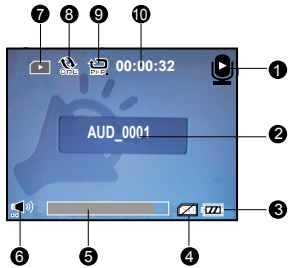
■ Still Image Playback

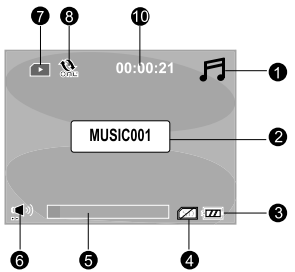
1. Still-image playback mode
2. Battery power indicator
3. SD memory card indicator
4. Folder and file name



■ Audio / MP3 Playback

1. Audio/MP3 playback mode icon
2. File name
3. Battery power indicator
4. SD memory card indicator
5. Audio/MP3 status bar
6. Sound level (speaker volume)
7. Playback indicator
8. Play mode indicator
   - Play one file
   - Play all files
   - Play the selected files
9. Repeat indicator
10. Elapsed time



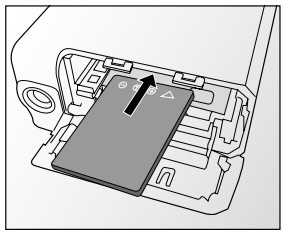


GETTING STARTED

Installing the Battery

We highly recommend using the specified rechargeable lithium-ion battery to realize the fully capability of your digital video camera. Charge the battery before using the digital video camera. Make sure that the power of the digital video camera is off before inserting or removing the battery.

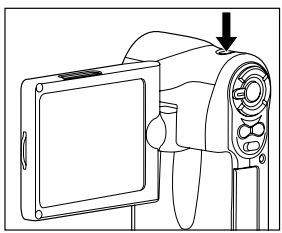
1. Slide the battery/SD memory card cover.
2. Insert the battery in the correct orientation, as shown.
3. Close the battery/SD memory card cover firmly.



Turning the Power On/Off

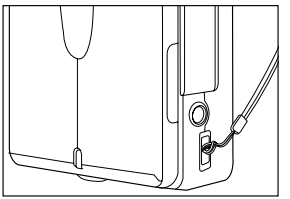
Press and hold the ⏻ button until the digital video camera turns on.

■ To turn the power off, press and hold the ⏻ button again.



Attaching the Hand Strap

Attach the strap as shown in the illustration.



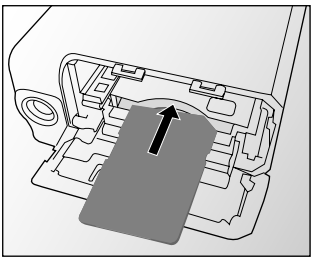
LED Indicators

Indicator	State	Description/Activity
LED indicator	Solid green	1. The digital video camera is powering up. 2. The digital video camera is ready to record images (or video clips).
LED indicator	Blinking green	USB communication/transfer is in progress.
LED indicator	Blinking red	Charging the flash.
Self-timer indicator	Blinking red	The self-timer function is activated.

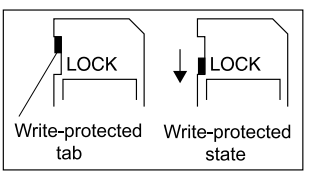
Loading an SD Memory Card (Optional Accessory)

The digital video camera comes with 32MB of internal memory (24MB available for image storage), allowing you to record video clips, captured still images, MP3 and audio files in the digital video camera. However, you can also expand the memory capacity by using an SD memory card so that you can store more files.

1. Open the battery/SD memory card cover.
2. Insert the SD memory card.
   - If the card cannot be inserted, check the orientation.
3. Close the battery/SD memory card firmly.
   - To remove the SD memory card, make sure the camera is turned off. Open the battery/SD memory card cover, then press lightly on the edge of the memory card and it will eject.

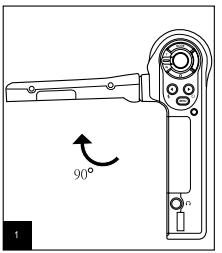


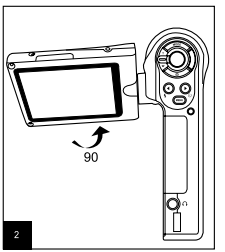
- Be sure to format an SD memory card with this digital video camera before using it. Refer to section in the manual titled “Formatting an SD memory card” for further details.
- To prevent valuable data from being accidentally erased from an SD memory card, you can slide the write protect tab (on the side of the SD memory card) to “LOCK”.
- To save, edit, or erase data on an SD memory card, you must unlock the card.

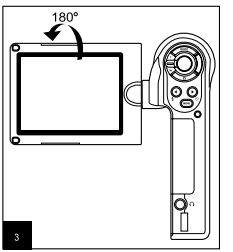


Using the LCD Panel

1. Open the panel by pulling it away from the digital video camera.
2. Choose the angle of the monitor that suits you best by rotating the panel.







- Make sure you open the LCD panel at 90 degrees before attempting to rotate it.
- Rotate the LCD panel carefully and with the correct direction, over rotation and rotation with the wrong direction may damage the hinge that connects the LCD monitor to the digital video camera.
- Avoid contact with the LCD monitor when moving the LCD panel.
- Do not hold the digital video camera by the LCD panel.

Setting the Date and Time

The date/time setting screen will automatically appear:

- When first turning the digital video camera on;
- When turning the power on after leaving the digital video camera without the batteries for an extended period of time.

1. Turn on your digital video camera.
2. Press the **MENU** button.
3. Move to [SYSTEM MENU] by using the ◀ button.
4. Select [DATE SETUP] with the zoom lever, and press the ○ button.
   - The [DATE SETUP] setting screen is displayed.
5. Select the item's field with the ◀/▶ buttons and adjust the vale for the date and time with the zoom lever.
6. After confirming all settings are correct, press the ○ button.

Choosing the Display Language

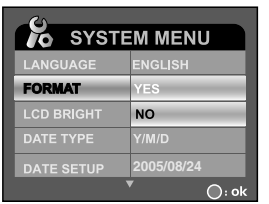
Choose a language for information displayed on the LCD monitor.

1. Turn on your digital video camera.
2. Press the **MENU** button.
3. Move to [SYSTEM MENU] by using the ◀ button.
4. Select [LANGUAGE] with the zoom lever, and press the ○ button.
   - The [LANGUAGE] setting screen is displayed.
5. Select the desired language using the zoom lever, and press the ○ button to confirm the selection.

Formatting Internal Memory or an SD Memory Card

Formatting erases all images, videos, sound, MP3 files and folders that are stored on the SD memory card or internal memory. Formatting is not possible if an SD memory card is locked.

1. Turn on your digital video camera.
2. Press the **MENU** button.
3. Move to [SYSTEM MENU] by using the ◀ button.
4. Select [FORMAT] with the zoom lever, and press the ○ button.
5. Select [YES] with the zoom lever, and press the ○ button.



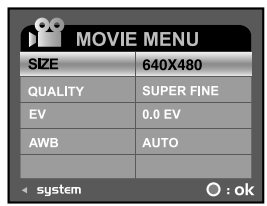
- You should format an SD memory card before using it for the first time.
- Formatting an SD memory card also erases the protected images. All data other than images are also erased. Before formatting the card, make sure that all the images are unnecessary.
- Formatting is an irreversible action and data cannot be recovered at a later time.
- An SD memory card having any problem cannot be properly formatted.

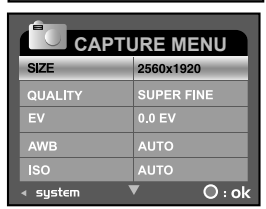
Setting Image Resolution and Quality

Resolution and quality settings determine the pixel size (dimension), image file size, and compression ratio for your images. These settings affect the number of images that can be stored. As you get to know the camera, it is recommended that you try each quality and resolution setting to get an appreciation for the effects that these settings will have on your images.
Higher resolution and higher quality images offer the best photographic results, but produce large file sizes. Therefore, few images will take up a lot of memory space.
High resolution and quality settings are recommended for printed output and situations requiring the finest detail. Lower resolution/quality images take up less memory space and may be quite suitable for sharing images via e-mail, in a report, or on a web page.

To change image resolution or image quality, perform these steps below:

1. Turn on your digital video camera.
2. Press the **MODE** button continuously until the Capture or Video Mode appears.
3. Press the **MENU** button.
   - the [CAPTURE MENU] or [MOVIE MENU] screen is displayed.
4. Select [SIZE] with the zoom lever, and press the ○ button to view the resolution choices.
5. Select the desired resolution with the zoom lever, and press the ○ button to confirm.
6. Select [QUALITY] with the zoom lever, and press the ○ button to view the quality choices.
7. Select the desired quality with the zoom lever, and press the ○ button to confirm.





- The possible number of shots and recording time depend on the storage size, resolution and quality settings and the subject of the image to be captured.

Possible number of shots (still image)

This table shows approximate shots that you can capture at each setting based on the internal memory or an SD memory card.

Resolution	Quality	Internal memory	128 MB SD memory card
3264 x 2448 8M	SUPER FINE	4	23
	FINE	9	47
	NORMAL	14	70
2560 x 1920 5M	SUPER FINE	7	40
	FINE	15	79
	NORMAL	23	120
2048 x 1536 3M	SUPER FINE	11	62
	FINE	23	123
	NORMAL	35	185
1280 x 960 1.2M	SUPER FINE	30	159
	FINE	59	312
	NORMAL	88	458
640 x 480 .3M	SUPER FINE	115	600
	FINE	214	975
	NORMAL	249	1300

Possible recording time / sec (video clip)

Resolution	Quality	Internal memory	128 MB SD memory card
640 x 480 640	SUPER FINE	0:43	3:53
	FINE	0:57	5:10
	NORMAL	1:11	6:26
320 x 240 320	SUPER FINE	1:08	6:11
	FINE	1:42	9:12
	NORMAL	2:15	12:10

* The data shows the standard testing results. The actual capacity varies according to the shooting conditions and settings.

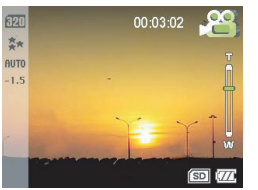
PHOTOGRAPHY MODES

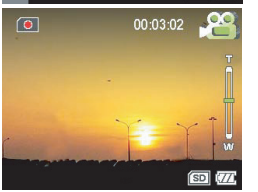
Capturing Still Images

In this mode, you may capture still images.

1. Turn on your digital video camera.
2. Press the **MODE** button continuously until the Capture Mode appears.
3. Compose your image on the LCD monitor.
4. Press the 📷 button to capture a still image.
   - The actual captured image appears to be larger than the one on LCD preview after image captured.

Recording Video Clips





In this mode, you may record video clips.

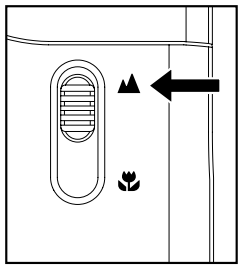
1. Turn on your digital video camera.
2. The default mode is Video Mode. If not, press the **MODE** button continuously until the Video Mode appears.
3. Compose the shot.
4. Press the ◯ button.
   - The recording of the video clip will start.
   - Pressing the ◯ button again will pause the recording. Pressing the ◯ button during pause will resume recording.
5. Press the 📷 button to stop recording.

- When recording video clips, the flash and self-timer cannot be used.

Normal Mode

This mode is suitable for scenery and portrait shooting.

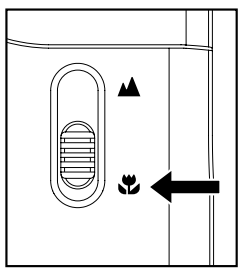
1. Turn on your digital video camera.
2. Slide the focus switch to the ▲ side.
3. Compose the shot.
4. Press the 📷 button to capture a still image.
   - To record video clips, press the ○ button to start recording, and then press the 📷 button to end the recording.



Macro Mode

Select this when you want to take a close-up photography.

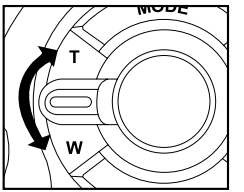
1. Turn on your digital video camera.
2. Slide the focus switch to the 🌷 side.
3. Compose the shot.
4. Press the 📷 button to capture a still image.
   - To record video clips, press the ○ button to start recording, and then press the 📷 button to end the recording.



- After a macro shot is taken **DO NOT FORGET** to reset the lens to the normal position.
- Flash mode is automatically set to off once you switch to Macro mode.

Using the Digital Zoom

Zoom photography allows you to capture telephoto and wide-angle shots.

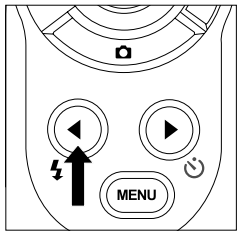


1. Turn on your digital video camera.
2. Compose the shot with the zoom lever.
   - The subject appears closer by sliding the zoom lever to the **T** side.
   - The subject appears farther away by sliding the zoom lever to the **W** side.
3. Press the 📷 button to capture a “zoomed” image.
   - To record video clips, press the ○ button to start recording, and then press the 📷 button to end the recording.
   - You can also use the zoom lever to zoom in or zoom out the subject while recording the video clips.

- The digital zoom range is from 1x to 8x.

Setting the Flash

Set the flash to suite for the photographic conditions.
1. Turn on your digital video camera.
2. Press the ϟ button to select the desired flash mode.



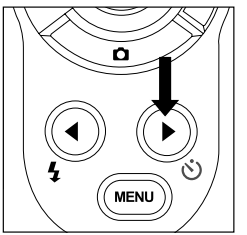
The table below will help you choose the appropriate flash mode:

Flash Mode	Description
Flash off	The flash will not fire. Select this mode when capturing images in a place where flash photography is prohibited, or when the distance to the subject is beyond the effective range of the flash.
Auto flash	The flash fires automatically according to the ambient lighting conditions. Select this mode for general flash photography.
Auto flash with red-eye reduction	Use this mode to reduce the red-eye phenomenon when you want to take natural-looking photographs of people and animals in low-light conditions. When taking photographs, the red-eye phenomenon can be reduced by asking the subject (person) to look at the digital video camera or get as close to the digital video camera as possible.

■ The flash cannot be set in the video mode.

Setting the Self-Timer

This setting allows still images to be captured with the self-timer.



1. Turn on your digital video camera.
2. Press the ⏲ button to select the setting.
3. Compose the shot.
4. Press the 📷 button.
   - The self-timer LED and self-timer icon flash, and then the image is captured after the preset time has elapsed.
   - To cancel the self-timer during operation, press again the ⏲ button.
   - Once the self-timer has been activated and the 📷 button has been pressed, you can not slide the zoom lever.

The table below will help you choose the appropriate self-timer mode:

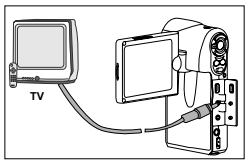
Self-timer mode	Description
⏲ 3 sec.	The picture is taken about 3 seconds after the 📷 button is pressed.
⏲ 10 sec.	The picture is taken about 10 seconds after the 📷 button is pressed.

- Self-timer cannot be set in the video mode.
- The self-timer setting is automatically cancelled after an image is captured.

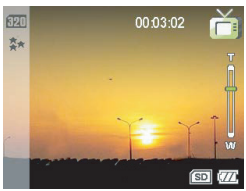
TV Recording Mode

The TV recording function allows you to record TV program from a television.

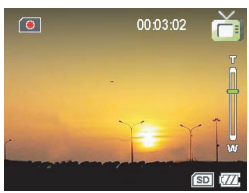
1. Connect one end of the A/V IN cable to the A/V IN terminal of the digital video camera.
2. Connect the other end to the A/V output socket of the TV set.



3. Turn the TV and device on.
4. Toggle the **MODE** button to select the TV mode.



5. Press the ○ button to start recording. To stop recording, press the 📷 button.



- The AV cable must be connected to the device and TV set, otherwise, the TV recording function will not be available to use.
- Switching TV channel during the TV program recording process may cause the device to stop responding (hang).

PLAYBACK MODE

Playing Back Still Images/ Video Clips

You can playback the still images on an LCD monitor.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the ○ button.
   - The last image/video clip appears on the LCD monitor.
4. Select the desired images with the zoom lever.
   - To view the previous image, slide the zoom lever to the **T** side.
   - To view the next image, slide the zoom lever to the **W** side.
   - To start playing back the video clips, follow the steps 1-4 above, then press the ○ button.

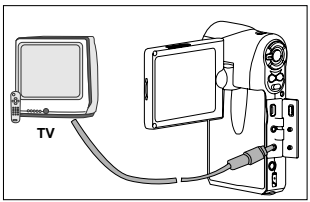
- A press of the ◀/▶ buttons during playback allows fast forward play / fast reverse play.
- To pause video playback, press the ○ button; to cancel pause, press the ○ button again.
- To stop video playback, press the 🖸 button. This stops playback and returns to the start of the video clip.

- If the video cannot be playback in the WMP 9.0, please you have to update the renewed of WMP 9.0 from the Microsoft website.
- To adjust the sound level, sliding the zoom lever to the **T** side will increase the volume, sliding the zoom lever to the **W** side will decrease the volume.

Playing Back Still Images/Video Clips on TV

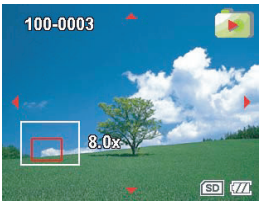
You can also playback your images on a TV screen. Before connecting to any devices, make sure to select NTSC / PAL system to match the video output system of the video equipment you are going to connect to the digital video camera, then turn all connected devices off.

1. Connect one end of the A/V OUT cable to the A/V OUT terminal of the digital video camera.
2. Connect the other end to the A/V input socket of the TV set.
3. Turn the TV and digital video camera on.
4. Playback the still images / video clips.
   - The method of operation is the same as playing back still images and video clips on the digital video camera.



Zoom Playback

Images that are being playback can be enlarged. The zoom factor displayed on the screen shows the current magnification ratio.



1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the ◯ button.
4. Select the desired image with the zoom lever.
5. The displayed image can be enlarged by each press of the 📷 button. The magnification factors range from 1x to 8x (within 16 stages: 1.0x, 1.5x, 2.0x, 2.5x, 3.0x, 3.5x, 4.0x, 4.5x, 5.0x, 5.5x, 6. 0x, 6.5x, 7.0x, 7.5x, 8.0x and thumbnail display).
   - ■ During zoom playback, the outer frame indicates the entire image; while the inner frame indicates the location of the currently enlarged area.
6. Slide the zoom lever upward or downward or press the ◀/▶ buttons to select the area to enlarge.

Thumbnail Display

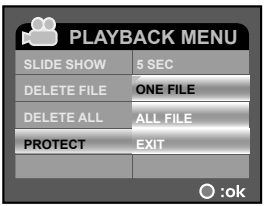
This function allows you to view 9 thumbnail images on the LCD monitor at the same time, which can quickly search for the image that you want.

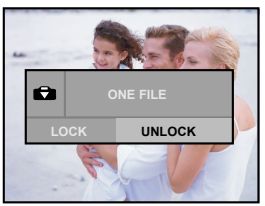
1. Follow "Zoom Playback" section steps 1-5 until the thumbnail display on the screen.
2. Press the ◀/▶ buttons or the zoom lever to select the image/video clip to be displayed at regular size.
3. Press the 📷 button.

Protecting Still Images/Video Clips

Set the data to read-only to prevent images from being erased by mistake.

1. Turn on your digital video camera.
2. Togge the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the ○ button.
4. Select the still image/video clip that you want to protect with the zoom lever.
   - You may select the still image/ video clip that you want to protect from the thumbnail display.
5. Press the **MENU** button.
   - The [PLAYBACK MENU] is displayed.
6. Select [PROTECT] with the zoom lever, and press the ○ button.
7. Select [ONE FILE] or [ALL FILE] with the zoom lever, and press the ○ button.
8. Select [LOCK] by pressing the ◀/▶ buttons, and press the ○ button.
   - Protect is executed and the digital video camera returns to the play mode.
   - The protect icon is displayed with protected images. When [ALL FILE] is selected, is displayed with all the images.
   - To cancel protection, follow the step 5-8 to select [UNLOCK] by pressing the ◀/▶ buttons, and press the ○ button.
   - The removal of image protection is executed and the digital video camera returns to the play mode.

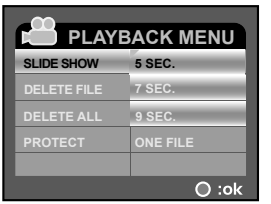




Slide Show Display

The slideshow function enables you to playback still images/video clips automatically in order one image at a time.

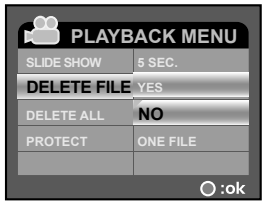
1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the ○ button.
4. Press the **MENU** button.
5. Select [SLIDE SHOW] with the zoom lever, and press the ○ button.
6. Set the playback interval with the zoom lever, and press the ○ button.
   - The slide show starts.
   - The video clips are displayed the first frame image, and not played back.
   - To stop slide show, press the ○ button.

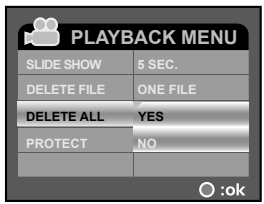


- You can adjust slide show display interval within the range of 5 SEC, 7 SEC, and 9 SEC.

Deleting Still Images/Video Clips

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the ○ button.
4. Select the still image/video clip that you want to erase with the zoom lever.
   - You may select the still image/ video clip that you want to erase from the thumbnail display.
5. Press the **MENU** button.
6. Select [DELETE FILE] or [DELETE ALL] with the zoom lever, and press the ○ button.
   - [DELETE FILE]: Delete the current still image/video clip.
   - [DELETE ALL]: Delete all still images/video clips.
7. Select [YES] with the zoom lever, and press the ○ button.
   - To not delete, select [NO], and press the ○ button.
   - If all video clips/images are deleted, [NO FILE!] pops up.
   - If you want to turn back to the photography mode, press the **MODE** button.





MP3 MODE

The digital video camera offers you to playback MP3 files. You may download MP3 files to your computer and then copy them into the digital video camera via the USB cable or insert an SD memory card with MP3 files recorded into the digital video camera.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [MP3] with the zoom lever and press the ◯ button.
   - The MP3 LIST appears on the screen.

Button operations

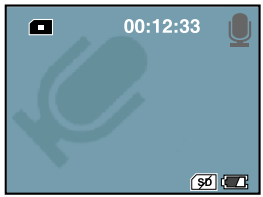
State / BUTTON	MP3	
	Playlist	During playback
⏻	Power off (press & hold)	Power off (press & hold)
T	Scroll up	Volume +
W	Scroll down	Volume -
◀	Previous page	-
▶	Next page/Add selection	-
MODE	Back to LCD preview	-
MENU	Enter MP3 menu	-
📷	-	Stop playing MP3 music
◯	Start to play MP3 music	Pause playing MP3 music

AUDIO RECORDING MODE

The digital video camera enables you to record and playback audio files anytime and anywhere.

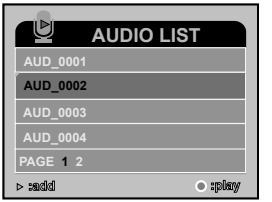
Recording Audio Files

1. Turn on your digital video camera.
2. Toggle the **MODE** button to select audio recording mode as the illustration.
3. Press the ○ button.
   - Voice starts recording.
   - To pause recording, press the ○ button again.
   - To stop recording, press the 📷 button.
   - The maximum recordable time for voice recording is over 1 hour.



Playing Back Audio Files

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [AUDIO] with the zoom lever and press the ○ button.
   - The AUDIO LIST appears on the screen.

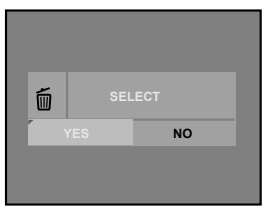


Button operations

State / Button	Audio	
	Playlist	During playback
⏻	Power off (press & hold)	Power off (press & hold)
T	Scroll up	Volume +
W	Scroll down	Volume -
◀	Previous page	-
▶	Next page/Add selection	-
MODE	Back to LCD preview	-
MENU	Enter AUDIO menu	-
📷	-	Stop playing audio file
○	Start to play voice file	Pause playing audio file

Deleting MP3 / Audio Files

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [MP3] / [AUDIO] with the zoom lever and press the ○ button.
   - The MP3 / AUDIO LIST appears on the screen.
4. Press the **MENU** button.
   - The [MP3 MENU] or [AUDIO MENU] appears on the screen.
5. Select [DELETE] with the zoom lever and press the ○ button.
   - [SELECT]: Delete the selected audio or MP3 file.
   - [ALL]: Delete all audio or MP3 files in a single operation.
6. Select [YES] with the zoom lever, and press the ○ button.
   - To not delete, select [NO], and press the ○ button.
   - If all files are deleted, [NO FILE!] pops up.
   - If you want to turn back to the photography mode, press the **MODE** button.

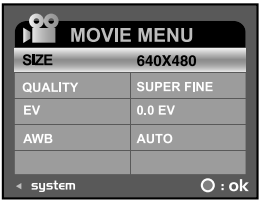


MENU OPTIONS

Video Menu

This menu is for the basic settings to be used when capturing video clips in the photography mode.

1. Turn on your digital video camera.
2. Press the **MENU** button. The [MOVIE MENU] is displayed on the screen.
3. Select the desired option item with the zoom lever, and press the ○ button.
4. Select the desired setting with the zoom lever, and press the ○ button.
5. To exit from the menu, press the **MENU** button.



SIZE

Sets the desired video resolution.

640: 640 X 480

320: 320 X 240

QUALITY

Sets the quality (compression rate) at which the video is to be recorded.

★★: SUPER FINE

★: FINE

★: NORMAL

EV

Your digital video camera adjusts the exposure of each scene automatically. However, if the subject is very dark, or very bright, you may override the digital video camera's automatic exposure determination to make the subject brighter or darker. This is called EV compensation. The EV compensation can be adjusted from -1.8EV to +1.8EV.

AWB

This sets the white balance photographing under a variety of lighting conditions and permits photographs to be taken that approach the conditions that are seen by the human eye.

[AUTO] AUTO: Automatic adjustment

[☀] DAYLIGHT: For recording outdoors on a bright day

[💡] LAMP: For recording under lamp light

[▦] FLUORESCENT-1: Cool white fluorescent (W3900-4500K)

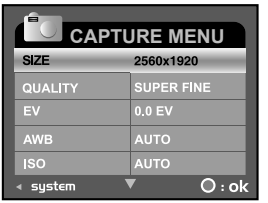
[▦] FLUORESCENT-2: Day white fluorescent (W4600-5400K)

[☁] SHADE: For recording outdoors on a cloudy day

Capture Menu

This menu is for the basic settings to be used when capturing still images in the photography mode.

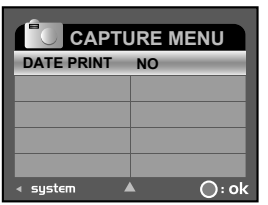
1. Turn on your digital video camera.
2. Toggle the **MODE** button to access in camera mode, then press the **MENU** button.
   - The [CAPTURE MENU] is displayed on the screen.
3. Select the desired option item with the zoom lever, and press the ○ button.
4. Select the desired setting with the zoom lever, and press the ○ button.
5. To exit from the menu, press the **MENU** button.



SIZE

Sets the desired image resolution.

- 8M: 3264 x 2448 (FW interpolation)
- 5M: 2560 x 1920
- 3M: 2048 x 1536
- 1.2M: 1280 x 960
- .3M: 640 x 480



QUALITY

Sets the quality (compression rate) at which the still image will be compressed and stored as JPG files.

- ★★: SUPER FINE
- ★: FINE
- ★: NORMAL

EV

Refer to section in this manual titled “EV” in Movie Menu for further details.

AWB

Refer to section in this manual titled “AWB” in Movie Menu for further details.

ISO

Sets the sensitivity for photography. When the sensitivity is raised (and the ISO figure is increased), photography will become possible even in dark locations, but the more pixelated (grainier) the image will appear.
[AUTO]: Auto adjustment
[100]: Equivalent to ISO 100
[200]: Equivalent to ISO 200
[400]: Equivalent to ISO 400

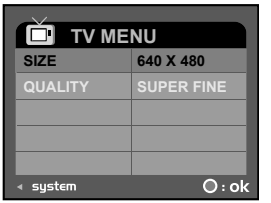
DATE PRINT

The capture date can be printed directly on your still images. This function must be activated before the image is captured.
[YES]: Imprints the date on the still images when capturing images.
[NO]: Does not imprint the date on the still images when capturing images.

TV Menu

This menu is for the basic settings to be used when capturing TV clips in the TV recording mode.

1. Turn on your digital video camera.
2. Press the **MENU** button. The [TV MENU] is displayed on the screen.
3. Select the desired option item with the zoom lever, and press the ○ button.
4. Select the desired setting with the zoom lever, and press the ○ button.
5. To exit from the menu, press the **MENU** button.



SIZE

Sets the desired TV clip resolution.

640: 640 X 480

320: 320 X 240

QUALITY

Sets the quality (compression rate) at which the TV clip is to be recorded.

★★★: SUPER FINE

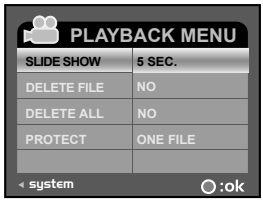
★★: FINE

★: NORMAL

Playback Menu

This menu sets which settings are to be used for playback.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the ◯ button.
4. Press the **MENU** button.
   - The PLAYBACK MENU is displayed on the screen.
5. Select the desired option item with the zoom lever, and press the ◯ button.
6. Select the desired setting with the zoom lever, and press the ◯ button.
7. To exit from the menu, press the **MENU** button.



SLIDE SHOW

Refer to section in this manual titled “Slide show display” for further details.

DELETE FILE

Refer to section in this manual titled “Deleting Still Images/Video Clips” for further details.

DELETE ALL

Refer to section in this manual titled “Deleting Still Images/Video Clips” for further details.

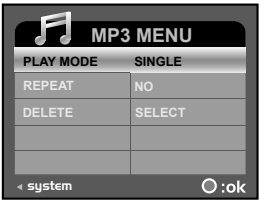
PROTECT

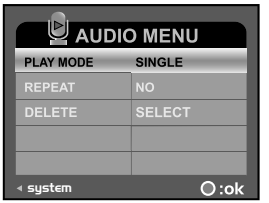
Refer to section in this manual titled “Protecting Still Images/Video Clips” for further details.

MP3 / Audio Menu

This sets whether or not to play MP3 files repeatedly or delete MP3 files.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [MP3] or [AUDIO] with the zoom lever, and press the ○ button.
4. Press the **MENU** button.
   - The [MP3 MENU] or [AUDIO MENU] is displayed on the screen.
5. Select the desired option item with the zoom lever, and press the ○ button.
6. Select the desired setting with the zoom lever, and press the ○ button.
7. To exit from the menu, press the **MENU** button.





PLAY MODE

Sets the method of the files playback mode.
[SINGLE]: Play only one audio or MP3 file.
[SELECT]: Play the selected audio or MP3 files.
[ALL]: Play all audio or MP3 files.

REPEAT

Sets to playback the files repeatedly.
[NO]: Play the listed files only once.
[YES]: Repeatedly play your audio or MP3 files according to your preference.

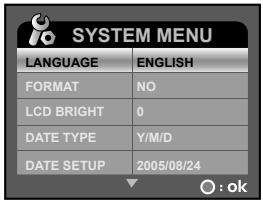
DELETE

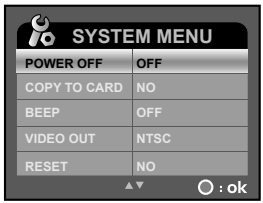
Refer to section in this manual titled “Deleting MP3 / Audio Files” for further details.

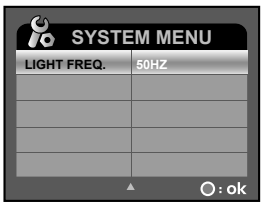
System Menu

Sets your digital video camera's operating environment.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to access in video, camera or playback (SELECT MODE) mode, then press the **MENU** button.
3. Press ◀ to access in SYSTEM MENU.
4. Select the desired option item with the zoom lever, and press the ○ button.
5. Select the desired setting with the zoom lever, and press the ○ button.
6. To exit from the menu, press the **MENU** button.







LANGUAGE

Refer to the section in this manual titled " Choosing the Display Language" for further details.

FORMAT

Please refer to the section in this manual titled "Formatting Internal Memory or an SD Memory Card" for further details.

LCD BRIGHT

Adjusts the brightness of the LCD monitor. The LCD becomes brighter by sliding the zoom lever to the **T** side and darker to the **W** side. The adjustment range is from -5 to +5.

DATE TYPE

Sets the displayed type of date and time on the screen.
[Y/M/D]: Year/Month/Day
[D/M/Y]: Day/Month/Year
[M/D/Y]: Month/Day/Year

DATE SETUP

Refer to section in this manual titled “Setting the Date and Time” for further details.

POWER OFF

If no operation is performed for a specific period of time, the power to the digital video camera is automatically turned off. This feature is useful to reduce battery wear.
* [OFF] / [1 MIN.] / [3 MIN.] / [5 MIN.] / [10 MIN.]

COPY TO CARD

Allows you to copy your files from the digital video camera's internal memory to a memory card. Of course, you can only do this if you have a memory card installed and some files in internal memory.
***** [YES] / [NO]

BEEP

Enables or disables the sounds (beeps) associated with digital video camera button functions.
[ON]: Enables sounds/beep tones.
[OFF]: Disables sounds/beep tones.

VIDEO OUT

Sets video output system of the video equipment that you are going to connect to the digital video camera.
[NTSC]:NTSC system
[PAL]: PAL system

RESET

Returns all basic settings to the digital video camera's default settings.
[YES]: Returns to the default settings.
[NO]: Does not return to the default settings.

LIGHT FREQ.

When photographing under artificial lighting, select the correct frequency setting depending on your country's electrical standard.
* [60HZ] / [50HZ]

TRANSFERRING RECORDED FILES TO YOUR COMPUTER

To transfer the recorded files from the digital video camera to your computer, follow these steps:

Step 1: Install the USB driver (Windows 98 only)
Step 2: Connect the digital video camera to your computer
Step 3: Download image, audio and video files

System requirements (Windows)

- PentiumIII 600 MHz or higher
- Windows 98/98SE/Me/2000/XP
- 64MB RAM
- 128MB hard disk space
- CD-ROM drive
- Available USB port

Step I: Install the USB driver (Windows 98 only)

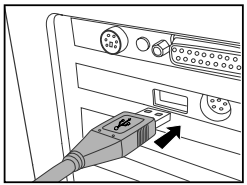
Windows 98 computers

The USB driver on the CD-ROM is exclusively for Windows 98 computers. Installing the USB driver on computers running Windows 2000/ME/XP is not necessary.

1. Insert the CD-ROM that came with the digital video camera into your CD-ROM drive. The welcome screen appears.
2. Click "**Install USB/PC-Cam driver**". Follow the on-screen instructions to complete the installation. After the USB driver has been installed, restart your computer.

Step 2: Connect the digital video camera to your computer

1. Connect one end of the USB cable to the USB connector on the digital video camera.
2. Connect the other end of the USB cable to an available USB port on your computer.
3. Turn on your digital video camera.
   - The [USB MODE] screen appears on the screen.
4. Select [MASS STORAGE] with the zoom lever, and press the ○ button.
5. From the Windows desktop, double click on "My Computer".
6. Look for a new "Removable disk" icon. This "Removable disk" is actually the memory or memory card in your digital video camera.
7. Double click on the removable disk and locate the DCIM, MP3 and AUDIO folders.
8. Double click on the folders to open it to find more folders.
   - Your recorded images, video clips and audio files will be inside these folders.
   - Copy, Paste or Drag-N-Drop images, videos, and audio to a folder on your computer.



- Whenever the USB power supply is used while transferring images to your computer, the other buttons on your digital video camera will not perform the functions.

Step 3: Download still images, video clips and audio files

When the digital video camera is turned on and connected to your computer, it is considered to be a disk drive, just like a floppy disk or CD. You can download (transfer) images by copying them from the "Removable disk" to your computer hard drive.

Windows

Open the "removable disk" and subsequent folders by double clicking on them. Your images, videos, and audio are inside these folder(s). Select the files that you want, and then choose "Copy" from the "Edit" menu. Open the destination location (folder) and choose "Paste" from the "Edit" menu. You may also drag and drop image files from the digital video camera to a desired location.

- The recorded audio files are stored on the "AUDIO" folder.
- For transferring MP3 files, simply copy the MP3 files from your computer hard drive to the "MP3" folder.
- Memory card users may prefer to use a memory card reader (highly recommended).
- Video playback application is not included with the package. Make sure that video playback application has been installed in your computer.

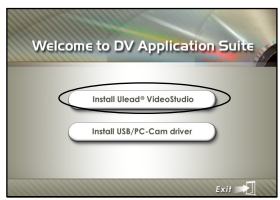
INSTALLING VIDEOSTUDIO

Ulead® VideoStudio is home video-editing software that makes editing video clips as fun as shooting them. Users can make one in three easy steps using the new Movie Wizard mode. VideoStudio features fully customizable filters and special effects and shares finished projects on diversified devices by supporting the latest formats.

To install VideoStudio:

1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.

2. Click "**Install Ulead® VideoStudio**". Follow the on-screen instructions to complete the installation.



- For more information about the operation of VideoStudio application software, refer to its respective help documentation.
- For Windows 2000/XP users, please make sure to install and use the VideoStudio in "Administrator" mode.
- VideoStudio is not supported on the Mac.

USING THE DIGITAL VIDEO CAMERA AS A PC CAMERA

Your digital video camera can act as a PC camera, which allows you to videoconference with business associates, or have a real-time conversation with friends or family.

To use the digital video camera as a PC camera, follow these steps:
Step 1: Install the PC camera driver (same as USB driver)
Step 2: Connect the digital video camera to your computer
Step 3: Run your application software (i.e. Windows NetMeeting)

- Video conferencing (or video editing) software is not included with the digital video camera.
- This mode is not supported for Mac.

General system requirements for videoconference

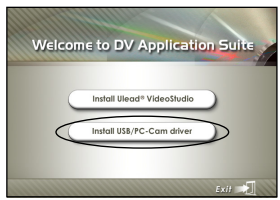
To use the digital video camera for videoconference, your computer system must include:

- Microphone
- Sound card
- Speakers or headphones
- Network or Internet connection

Step I: Install the PC Camera Driver (same as USB driver)

The PC-camera driver included on the CD-ROM is exclusively for Windows. The PC camera function is not supported for Mac platforms.

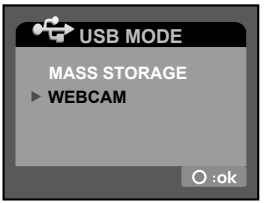
1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.
2. Click "**Install USB/PC-Cam driver**". Follow the on-screen instructions to complete the installation. After the driver installation is completed, restart your computer.



- The USB driver that bundled inside the CD-ROM is designed in a form 2 in 1 (USB & PC camera driver).
  a) On Windows 98, the Windows OS will install both USB & PC camera drivers.
  b) On Windows 2000/ME/XP, it will only install PC camera driver.

Step 2: Connect the Digital Video Camera to Your Computer

1. Connect one end of the USB cable to the USB connector on the digital video camera.
2. Connect the other end of the USB cable to an available USB port on your computer.
3. Turn on your digital video camera.
   - The [USB MODE] screen appears on the screen.
4. Select [WEBCAM] with the zoom lever, and press the ○ button.
5. Position the digital video camera steadily on top of your computer monitor or use a tripod.



Step 3: Run Your Application Software(i.e. Windows NetMeeting)

To use Windows NetMeeting for videoconference:

1. Go to **Start** => **Programs** => **Accessories** => **Communications** => **Net Meeting** to launch the NetMeeting program.
2. Click the Start Video button to view live video.
3. Click the Place Call button.
4. Type the e-mail address or the network address of the computer that you are calling.
5. Click Call. The person that you are calling must also have Windows NetMeeting running and be willing to accept your call to start the videoconference.

- The video resolution for videoconferencing applications is generally 320 x 240.
- For more information about the operation of videoconference application software, refer to its respective help documentation.
- When the PC cam function is activated (i.e. images are being transferred), the LED (green color) blinks. If the USB cable is unplugged at the time of transferring images, the screen would become blank the next time when you run the PC cam function. In this situation, you should restart the computer. The proper operating method should be: Close the PC cam application, then remove the USB cable.

SPECIFICATIONS

Item	Description
Image Sensor	CMOS sensor (5.0 megapixels)
Image size	Still image: 3264 x 2448 (FW interpolation), 2560 x 1920, 2048 x 1536, 1280 x 960, 640 x 480 Video clip: 640 x 480 (30fps), 320 x 240 (30fps)
Recording media	32 MB internal memory (24 MB available for image storage) Supports SD memory card (up to 1 GB) (optional)
Compression format	MPEG 4 SP (Video), IMA-ADPCM (Audio)
File format	EXIF 2.1, DCF 1.0, JPEG, ASF (Video)
Lens	Aperture range: 3.3 Focal Length: 6.95mm
Focus range	Normal: 1m - infinity Macro: 0.6m - 1m
LCD monitor	2.5” full color LTPS LCD (230K pixels)
Shutter speed	1/2000 ~ 1/2 sec.
Self-timer	3-sec delay, 10-sec delay
Interface	USB connector, A/V IN terminal, A/V OUT terminal, earphone jack
Power	Rechargeable Lithium-ion battery (NP60)
Dimension	Approx. 118 x 58 x 28mm (without protruding parts)
Weight	Approx. 140g (without battery and the SD memory card)

* Design and specifications are subject to change without notice.

TROUBLESHOOTING

Refer to the symptoms and measures listed below before sending the digital video camera for repairs. If the problem persists, contact your local reseller or service center.

Power Supply

Symptom	Cause	Measure
The power does not come on.	The battery is not loaded.	Load the battery correctly.
	The battery is exhausted.	Recharge the battery.
	The AC power adaptor is not connected correctly.	Reconnect it properly.
The power cuts out during use.	The digital video camera was left unattended and unused, so the auto power off cuts it off.	Turn the power back on.
	The battery is exhausted.	Recharge the battery.
The power does not go off.	Digital video camera malfunction.	Reload the battery.
The battery runs out quickly.	It is being used in extreme low temperature.	
	Many images are being captured in dark places inside, requiring flash.	
	The battery is not fully charged. The battery is not used for an extended period of time after charged.	Fully charge the battery and discharge it for at least one complete cycle before use to maximize its performance and lifetime.
The battery or digital video camera feels warm.	Long period of continuous use of the digital video camera or the flash.	

Shooting

Symptom	Cause	Measure
Even if I press the shutter button, the digital video camera does not shoot.	The battery is running low.	Recharge the battery.
	The power is not on.	Turn the power on.
	The digital video camera is not in shooting mode.	Slide the mode switch to shooting mode.
	The shutter button is not pressed all the way.	Press the shutter button all the way.
	The internal memory or memory card does not have any free space.	Load a new memory card, or delete unwanted files.
	End of memory card life.	Load a new memory card.
	The flash is recharging.	Wait until the system LED off.
	The memory card is unrecognized by the digital video camera.	Format the memory card in this digital video camera before its first use or when it was used other than this digital video camera.
	The auto power off function is activated.	Turn the power on again.
Images do not appear on the LCD monitor.	The power is not on.	Turn the power on.
	The LCD monitor is dark.	Adjust the brightness of the LCD monitor in the SYSTEM MENU.
The flash does not fire. The flash cannot recharge.	The digital video camera is set to mode.	Set the focus switch to position.
	The flash is set to flash off.	Set the flash to something other than flash off mode.

Symptom	Cause	Measure
Even though the flash fired, the image is dark.	The distance to the subject is greater than flash effective range.	Get closer to your subject and capture.
The image is too dark.	The image was captured in a dark place while set to flash off.	Set the flash to something other than flash off mode.
	It is under-exposed.	Set the exposure compensation to a larger value.
The image is too bright.	It is over-exposed.	Set the exposure compensation to a smaller value.
The image lacks natural color.	The image was captured in conditions that are hard for Auto White Balance to adjust to.	Add a white object to the composition.

Playback

Symptom	Cause	Measure
Cannot playback.	It is not set to playback mode.	Slide the mode switch to playback mode.
The contents of memory card cannot be replayed.	You played back a memory card that was not formatted by this device.	Loaded a card that was formatted and stored on by this device.
Files cannot be deleted.	The file is protected.	Cancel protection.
	You played back a memory card that was not formatted by this device.	Loaded a card that was formatted and stored on by this device.
Cannot format a memory card.	The memory card is write-protected.	Remove the write-protection.
	End of memory card life.	Load a new memory card.
The playback image is dark though I used the flash.	The LCD monitor is too dark.	Adjust the brightness of LCD monitor in the SYSTEM MENU.

Other Problems

Symptom	Cause	Measure
Cannot load the memory card.	The card is facing the wrong way.	Load correctly.
Even when the digital video camera's buttons are pressed, it does not operate.	The battery is running low.	Recharge the battery.
	Digital video camera malfunction.	Turn the power off and remove the battery once, and try again.
The date and time is wrong.	The correct date and time is not set.	Set the correct date and time.
The date set has disappeared.	The battery is removed with the power still on.	Set the date and time again.

About connecting to your computer/software

Symptom	Cause	Measure
Cannot download files.	The free space on the hard disk drive of your computer may be insufficient.	Check whether the hard disk drive has enough space for running Windows, and if the drive for loading files has a capacity at least that of the memory card inserted in the digital video camera.
	No power supply.	Recharge the battery or turn the power on.
	The USB driver is not installed (for Windows 98/98SE).	Install USB driver.